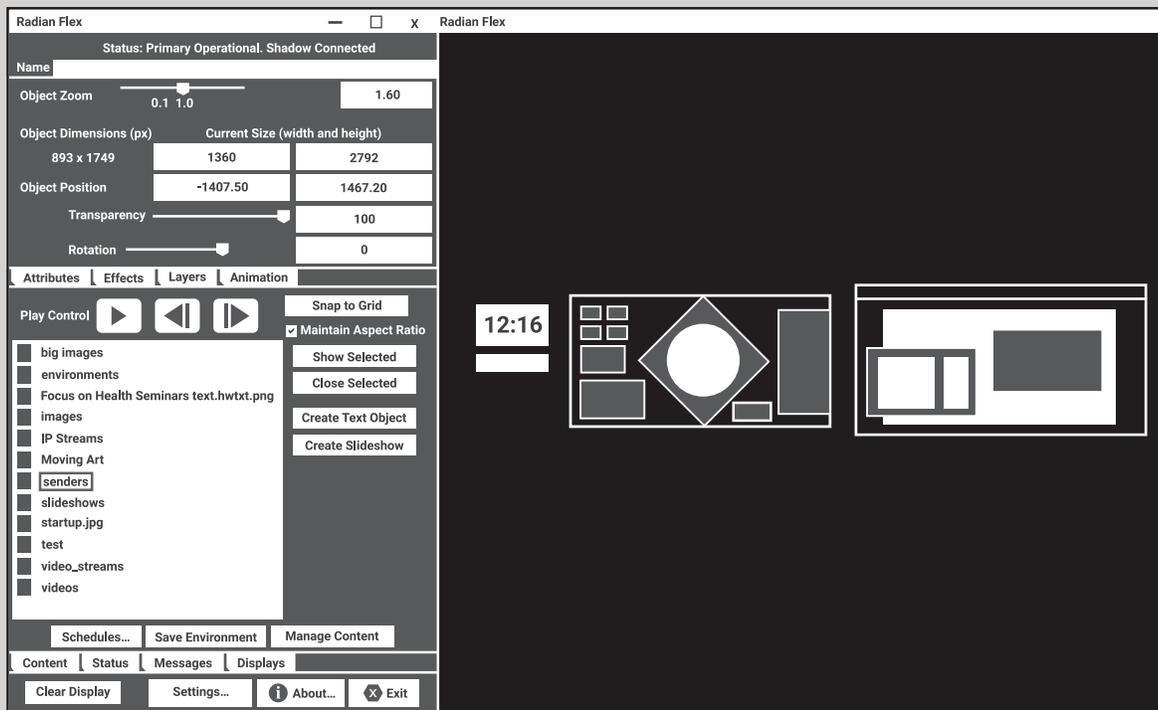


# DATA SHEET

VW-FLEX

# RADIAN FLEX VIDEO WALL PROCESSOR

24/7 TECHNICAL SUPPORT AT 877.877.2269 OR VISIT BLACKBOX.COM



# OVERVIEW

## RADIAN FLEX DATA SHEET

### INTRODUCTION

Radian Flex is a 100% software-based solution that offers you a flexible, scalable, futureproof video wall processing platform that's ideal for digital signage, corporate, education, and mission-critical visualization applications.

### NEW FEATURES

The Radian Flex Software v7.0 provides:

- **SUPPORT FOR UP TO 80 IP VIDEO STREAMS PER COMPUTER. THIS ENABLES EXISTING HARDWARE TO MANAGE MORE SOURCES.**
- **MILESTONE VMS SUPPORT. DISPLAY AND MANAGE MANY SOURCES WITH FEWER RADIAN FLEX LICENSES.**
- **CENTRALIZED SOURCE CONTROL VIA A NEW TAB IN THE CONTROL PANEL ENABLES YOU TO ACCESS AND BROWSE A LIST OF ALL AVAILABLE SOURCES, CONTROL SOURCES VIA KVM, CREATE NEW RTSP STREAMS, AND OPEN BROWSER WINDOWS.**
- **STREAMLINE CONTROL AND SIMPLIFY THE USER EXPERIENCE WITH SMARTFRAME ENHANCEMENTS. MOVE OBJECTS, MAXIMIZE USABLE SPACE, PREVIEW LAYOUTS, AND SNAP TO GRID AUTOMATICALLY.**
- **BACKGROUND CONTENT SYNCHRONIZATION MINIMIZES DISRUPTIONS IF THE HARDWARE FAILS.**
- **CAPTURE A STATIC IMAGE OF AN EVENT FOR LATER EXAMINATION.**
- **DEFINE SMARTFRAME GRIDS ON A VIDEO WALL'S ENTIRE CANVAS WITHOUT DISPLAY BEZEL LIMITS.**

Radian Flex Sync offers support for dvLED displays (requires VW-FLEX-SYNC license). It features:

- **INDUSTRY-EXCLUSIVE DVLED VIDEO WALL SUPPORT IDEAL FOR BORDERLESS LED DISPLAYS**
- **STATE-OF-THE-ART SYNCHRONIZATION ACROSS MULTIPLE LED CONTROLLERS**
- **SUPERIOR VISUAL EXPERIENCE WITH SMOOTH, TEAR-FREE MOTION ACROSS MULTIPLE VIDEO WALL CONTROLLERS**
- **ELIMINATES VISUAL ISSUES ASSOCIATED WITH LATENCY**

NOTE: Upgrades and licenses require an up-to-date Maintenance Agreement. Radian Flex Sync is purchased separately and is only available with Radian Flex software version 7.0.

### LEGACY FEATURES

- **FLEXIBLE—RADIAN FLEX GIVES YOU POWERFUL, SIMPLE, AND COMPLETE CONTROL OVER CONTENT AND DISPLAY, ENABLING CLEARER COMMUNICATION AND FASTER DECISION-MAKING.**
- **SCALABLE AND FUTUREPROOF—BECAUSE THERE'S NO HARDWARE, EXPANDING OR UPGRADING YOUR SYSTEM IS EASY AND COST-EFFECTIVE, AND THERE'S NO LIMIT ON THE RESOLUTION YOU CAN DISPLAY.**
- **FAILSAFE—WHEN IT HAS TO WORK NO MATTER WHAT, CHOOSE THE RADIAN FLEX PRO SUITE, WHICH SUPPORTS DUAL CONTROLLERS FOR INSTANT FAILURE RECOVERY WITH ZERO DOWNTIME.**

Choose the Radian Flex that meets your needs:

- **RADIAN FLEX STANDARD—OFFERS CORE RADIAN CAPABILITIES AND IS IDEAL FOR SIMPLE VIDEO WALL INSTALLATIONS THAT DON'T REQUIRE FAIL-SAFE OPERATION**
- **RADIAN FLEX PRO SUITE—DESIGNED FOR MISSION-CRITICAL VISUALIZATION SYSTEMS. DUAL CONTROLLERS ENSURE FAIL-SAFE OPERATION WITHOUT ANY DOWNTIME**

Both suites include the following components:

- **CONTROLLER SOFTWARE AND USER INTERFACE**
- **XT HD OR UHD VIEWER DRIVES YOUR VIDEO WALL'S DISPLAY DEVICES**
- **XD SOURCE LICENSE DELIVERS LIVE CONTENT TO YOUR WALL**

Radian Flex Pro Suite also includes the following features:

- **FS FOR FAULT TOLERANCE: USES DUAL CONTROLLERS FOR FAIL-SAFE OPERATION AND ZERO DOWNTIME**
- **XV LAYOUT CONTROL: SUPPORTS MULTIPLE VIDEO WALLS FROM A SINGLE SYSTEM**
- **XC OPERATOR ALLOWS YOU TO ACCESS YOUR VIDEO WALL CONTROL SYSTEM FROM REMOTE WORKSTATION**
- **XM KVM CONTROL ENABLES YOU TO GAIN KEYBOARD AND MOUSE CONTROL OF A REMOTE SOURCE**
- **XA ACCESS CONTROL USER RIGHTS MANAGEMENT LICENSE**
- **USE XS SERVICES (API) TO CONTROL YOUR RADIAN FLEX SYSTEM FROM EXTERNAL APPLICATIONS AND DEVICES, SUCH AS TABLETS, SMARTPHONES, AMX, CRESTRON AND OTHER CONTROL SYSTEMS**

Optional on both Radian Flex and Radian Flex Pro is Radian xCast software. It enables users in different locations to share live feeds and other content, making it ideal for large, multi-site organizations.

## COMPARISON CHART

FEATURE COMPARISON CHART		
FEATURE	RADIAN FLEX STANDARD	RADIAN FLEX PRO SUITE
ANIMATION	INCLUDED	INCLUDED
CONTENT MANIPULATION	INCLUDED	INCLUDED
SCHEDULE AND RESTORE	INCLUDED	INCLUDED
SLIDE SHOW	INCLUDED	INCLUDED
SMARTFRAME	INCLUDED	INCLUDED
VIDEO ENGINE	INCLUDED	INCLUDED
FAULT TOLERANCE	NOT INCLUDED, PURCHASED SEPARATELY	INCLUDED
LAYOUT CONTROL	NOT INCLUDED, PURCHASED SEPARATELY	INCLUDED
XM KVM CONTROL	NOT INCLUDED, PURCHASED SEPARATELY	INCLUDED
XS SERVICES (API)	NOT INCLUDED, PURCHASED SEPARATELY	INCLUDED
DVLED DISPLAYS SUPPORT	NOT INCLUDED, PURCHASED SEPARATELY	NOT INCLUDED, PURCHASED SEPARATELY



# SYSTEM REQUIREMENTS

## RADIAN FLEX AND RADIAN FLEX PRO CONTROLLER SOFTWARE

SYSTEM REQUIREMENTS FOR RADIAN FLEX AND RADIAN FLEX PRO CONTROLLER SOFTWARE	
OPERATING SYSTEM	Windows 7 or later, 64 bit
ETHERNET	Gigabit
MINIMUM	CPU: Dual core 2 GHz, 2 GB RAM GPU: NVIDIA® x40, AMD® HD3xxx, or Intel® HD2000
RECOMMENDED:	CPU: Intel fourth-generation (Haswell) or newer i5, 2.5 GHz or better, 4 GB dual channel RAM; GPU: NVIDIA GTX1050
MONITOR AND GRAPHICS ADAPTER:	Vertical resolution of at least 900 pixels; wide format display is recommended; 1920x1080 pixels or larger preferred.
STORAGE:	At least 20 GB free storage plus more for stored content

## RADIAN XT VIEWER SOFTWARE

SYSTEM REQUIREMENTS FOR XT VIEWER	
OPERATING SYSTEM	Windows 7, 8.1, or later
ETHERNET	Gigabit
MINIMUM	CPU: Dual core 2 GHz, 2 GB RAM GPU: NVIDIA® x40, AMD® HD3xxx, or Intel® HD2000
RECOMMENDED:	CPU: Intel fourth-generation (Haswell) or newer i5, 2.5 GHz or better, 4 GB dual channel RAM GPU: NVIDIA Quadro P2000 or better, 2 GB or more dedicated graphics RAM
STORAGE:	At least 20 GB free storage plus more for stored content

### CAUTION:

Radian Flex doesn't support daisy-chained displays.

Radian Flex's wake-on-LAN features will not function on Intel Pro-enabled CPUs.

## RADIAN XD SOURCE SOFTWARE

NOTE: Radian Xd Source software includes three components: Sender, Streamer and IP Streams

SYSTEM REQUIREMENTS FOR XT VIEWER	
<b>SENDER</b>	
OPERATING SYSTEM	Windows 7 or later, OSX with Java 1.8 or later, or Linux with Java 1.8 or later. Virtual machine environments may be used
ETHERNET	100Mb or 802.11N wireless
MINIMUM	CPU: Dual core 2 GHz, 2 GB RAM GPU: NVIDIA x30 or Intel HD4600
RECOMMENDED:	CPU: Intel fourth-generation (Haswell) or newer i5, 2.5 GHz or better, 4 GB dual channel RAM; GPU: NVIDIA GTX1050
<b>STREAMER</b>	
OPERATING SYSTEM	Windows 7 or later, 64 bit
ETHERNET	Gigabit
MINIMUM	CPU: Dual core, 2 GB RAM NVIDIA® x40, AMD® HD3xxx, or Intel® HD2000
RECOMMENDED:	CPU: Intel fourth-generation (Haswell) or newer i5, 2.5 GHz or better, 4 GB dual channel RAM; GPU: NVIDIA GTX1050
<b>IP STREAMS</b>	
OPERATING SYSTEM	Windows 7 or later, 64 bit, .NET 4.6.1
ETHERNET	1 Gbps
RECOMMENDED	CPU: Intel fifth-generation (Broadwell) or newer i7, 3.3 GHz or better, 16GB or more of main memory GPU: HD Graphics 6000



# SYSTEM REQUIREMENTS

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## RADIAN XC OPERATOR SOFTWARE

SYSTEM REQUIREMENTS FOR XC OPERATOR SOFTWARE	
OPERATING SYSTEM	Windows 7 or later, OSX with Java 1.8 or later, or Linux with Java 1.8 or later
ETHERNET	100 Mb or 802.11N (or better) wireless
MINIMUM	CPU: Dual core, 2 GB RAM;
RECOMMENDED:	CPU Dual core or more cores, 2.5 GHz or better, 2 GB RAM; Ethernet: 1 Gbps or 802.11N wireless

## RADIAN XCAST SOFTWARE

SYSTEM REQUIREMENTS FOR XCAST SOFTWARE	
OPERATING SYSTEM	Windows 7 or later (64 bit)
ETHERNET	Gigabit
MINIMUM	CPU: Dual core 2 GHz, 4 GB RA
RECOMMENDED:	CPU: Intel i5 3.3 GHz, 16 GB dual channel RAM, GPU: Discrete or embedded graphics controller required.

## KEY NODE SOFTWARE

SYSTEM REQUIREMENTS FOR KEY NODE SOFTWARE	
OPERATING SYSTEM	Windows 7 or later
ETHERNET	Gigabit
MINIMUM	CPU: Dual core 2 GHz or faster, 2 GB RAM GPU: Discrete or embedded graphics controller required.
RECOMMENDED:	CPU: Quad core, 2 GHz or faster
GRAPHICS CONTROLLER	Discrete or embedded graphics controller required.
MONITOR AND GRAPHICS ADAPTER:	Vertical resolution of at least 800 pixels



# SYSTEM REQUIREMENTS

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## NETWORK SWITCH REQUIREMENTS

SYSTEM REQUIREMENTS FOR NETWORK SWITCH	
<b>ETHERNET</b>	Non-blocking Gigabit Ethernet (all ports run at full wire speed with no packet loss).
<b>PROTOCOLS</b>	The Gigabit Ethernet switch should support the following IGMP protocols: <ul style="list-style-type: none"><li>• IGMP Snooping</li><li>• IGMP Querier</li><li>• IGMP Immediate-Leave (Fast-Leave)</li></ul> If using multiple switches, use an inter-switch (stacking) link..
<b>RECOMMENDED</b>	Managed Layer 2 switch recommended. Dedicated switch or a dedicated VLAN if VLANs are in use..
<b>NOT RECOMMENDED:</b>	Switches from Extreme Networks are not recommended because they have known incompatibilities

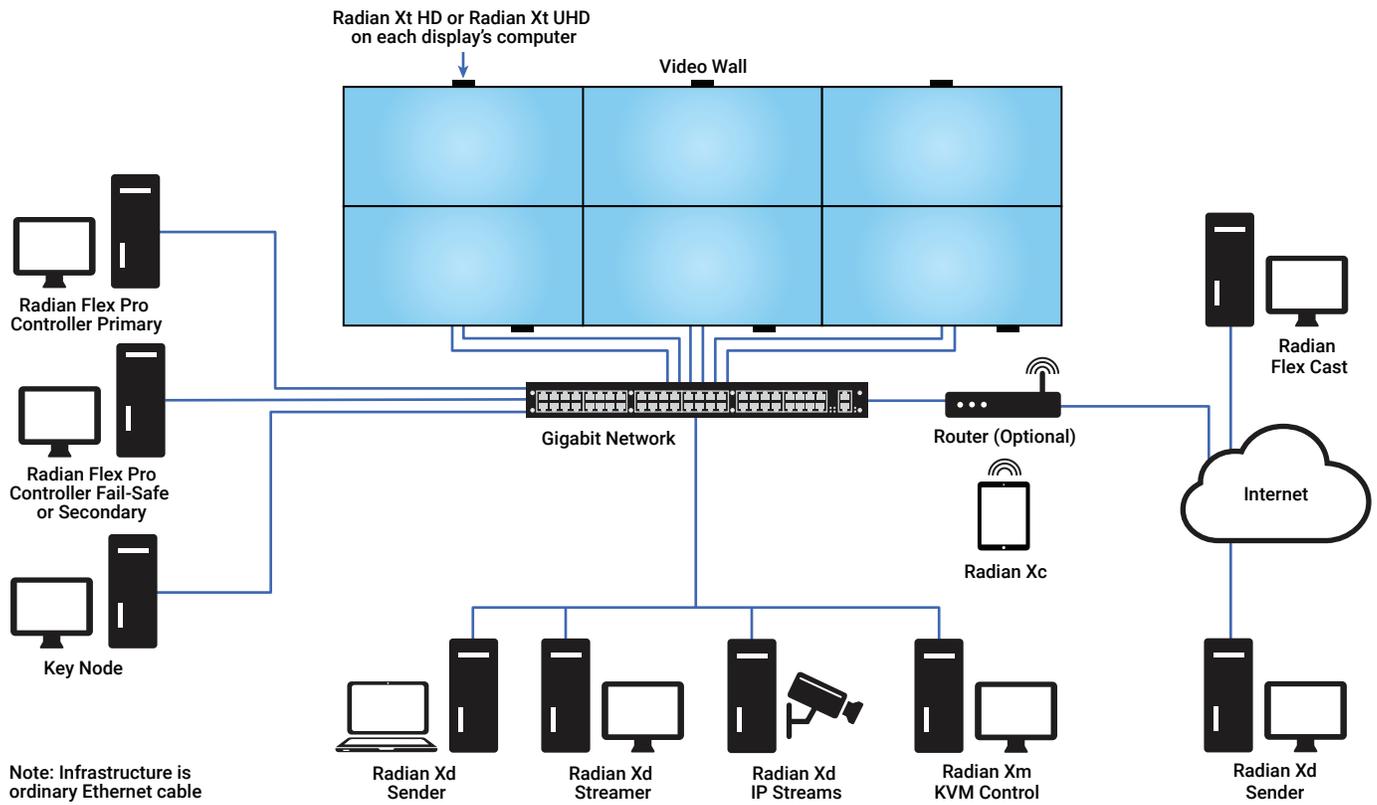
NOTE: Radian Flex Pro Suite Controller, Radian Flex Standard Controller, Key node computer, Radian Xd Viewer computers, and computers for Radian Xd Source streamers and IP Streams should be on the same subnet. It is acceptable to use two (or more) NICs to connect to multiple networks if needed.

NOTE: "Minimum" specs are the minimum necessary to have Radian Flex function. These may or may not suit your needs. "Recommended" specs represent a typical Radian Flex system with HD video playback up to 1080p. CPU or GPU intensive applications running on Radian Xd Source software increase the performance requirements of your hardware.

To learn more about designing a Radian Flex video wall or distributed visualization system tailored to your needs, contact Black Box Technical Support at 877-877-2269 or [info@blackbox.com](mailto:info@blackbox.com). Please include in your message where the system is being installed and details about the desired functionality.



# APPLICATION EXAMPLE



# ORDERING INFORMATION

ITEM	CODE
Radian Flex	
Standard	<b>VW-FLEX-STD</b>
Pro Suite	<b>VW-FLEX-PRO</b>
Licenses	
Xt UHD Viewer	<b>VW-FLEX-XT-UHD</b>
Xt HD Viewer	<b>VW-FLEX-XT-HD</b>
Xd Sender	<b>VW-FLEX-XD</b>
Xm KVM Control	<b>VW-FLEX-XM</b>
Xc ControlBridge Operator	<b>VW-FLEX-XC</b>
Xcast	<b>VW-FLEX-XCAST</b>
Xs Services API Control	<b>VW-FLEX-XS</b>
Xa User Rights Management	<b>VW-FLEX-XA</b>
Layout License	<b>VW-FLEX-XV</b>
dvLED Resolution Control	<b>VW-FLEX-LED</b>
dvLED Displays Support	<b>VW-FLEX-SYNC</b>

ITEM	CODE
Radian Flex Video Wall Software Maintenance	
Premium Suite	<b>VW-FLEX-PRO-MAINT</b>
Controller	<b>VW-FLEX-STD-MAINT</b>
FS – Fail Safe	<b>VW-FLEX-FS-MAINT</b>
XT HD Viewer	<b>VW-FLEX-XTHD-MAINT</b>
XT UHD Viewer	<b>VW-FLEX-XTUHD-MAINT</b>
LED Resolution Control	<b>VW-FLEX-LED-MAINT</b>
Sync LED Synchronization	<b>VW-FLEX-SYNC-MAINT</b>
Xd Source Applications	<b>VW-FLEX-XD-MAINT</b>
Xc Remote Control Operator	<b>VW-FLEX-XT-MAINT</b>
XCast Cast Source Sharing	<b>VW-FLEX-XCAST-MAINT</b>
Xm KVM Application	<b>VW-FLEX-XM-MAINT</b>
Xv Layout	<b>VW-FLEX-XV-MAINT</b>
Xs API	<b>VW-FLEX-XS-MAINT</b>
Xa User Access	<b>VW-FLEX-XA-MAINT</b>

## DISCLAIMER

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## ABOUT BLACK BOX

Black Box is a world leading technology solutions provider specializing in complete high-performance KVM, professional A/V signal distribution and extension and switching solutions for mission-critical applications. Black Box is dedicated to delivering superior project engineering, technical support, and 24/7 customer service you can rely on for your most critical operations.

Every day, our customers trust us to design, integrate, and maintain reliable control room solutions for broadcasting, post-production, stadiums & arenas, medical, air traffic control, oil & gas, government & military, and utility industries. Leave the tech to us and our comprehensive technology solutions will deliver secure connections, fast-response times, real-time collaboration and more.

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